



## BLASTP 2.2.9 [May-01-2004]

## Reference:

Altschul, Stephen F., Thomas L. Madden, Alejandro A. Schäffer, Jinghui Zhang, Zheng Zhang, Webb Miller, and David J. Lipman (1997), "Gapped BLAST and PSI-BLAST: a new generation of protein database search programs", Nucleic Acids Res. 25:3389-3402.

RID: 1084305495-12990-214576012592.BLASTQ3

Query=

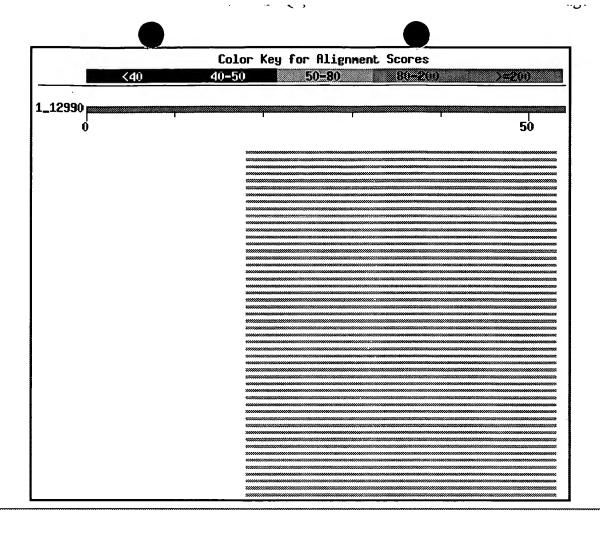
(54 letters) Residues 138-19/ Seq 10 10:206

If you have any problems or questions with the results of this search please refer to the  ${\tt BLAST\ FAQs}$ 

Taxonomy reports

## Distribution of 100 Blast Hits on the Query Sequence

Mouse-over to show defline and scores. Click to show alignments



	Score	E
Sequences producing significant alignments:	(bits)	Value
gi 532381 gb AAA21037.1  polyprotein	<u>77</u>	1e-13
<pre>gi 1246371 dbj BAA09974.1  polyprotein [Hepatitis C virus]</pre>	<u>77</u>	1e-13
<pre>gi 1724052 gb AAB40071.1  core protein [Hepatitis C virus]</pre>	76	2e-13
gi 1009261 dbj BAA07091.1  core, env and part of E2/NS1 [He	76	2e-13
gi 532455 gb AAA21074.1  polyprotein	76	2e-13
gi 1009257 dbj BAA07089.1  core, env, and part of E2/NS1 [He	75	3e-13
<pre>gi 974347 gb AAB40038.1  core protein [Hepatitis C virus ty</pre>	75	3e-13
<pre>gi 2326455 emb CAA72801.1  polyprotein [Hepatitis C virus t</pre>	75	3e-13
gi 1765870 dbj BAA13616.1  core, env, and part of E2/NS1 [He	<u>75</u>	4e-13
<pre>gi 3550763 dbj BAA32666.1  polyprotein [Hepatitis C virus]</pre>	75	4e-13
<pre>gi 600265 dbj BAA13617.1  core, env and part of E2/NS1 [Hep</pre>	<u>75</u>	4e-13
<u>gi 1765879 dbj BAA13621.1 </u> core, env and part of E2/NS1 [He	<u>75</u>	4e-13
<u>gi 1009271 dbj BAA07271.1 </u> core, env and part of E2/NS1 [He	<u>75</u>	4e-13
<pre>gi 21670895 dbj BAC02457.1  polyprotein [Hepatitis C virus</pre>	<u>75</u>	4e-13
<u>gi 1765868 dbj BAA13615.1 </u> core, env and part of E2/NS1 [He	<u>75</u>	4e-13
<pre>gi 14161281 gb AAK54688.1  polyprotein [Hepatitis C virus]</pre>	<u>75</u>	4e-13
<pre>gi 3550765 dbj BAA32667.1  polyprotein [Hepatitis C virus]</pre>	<u>75</u>	5e-13
<u>gi 1009263 dbj BAA07092.1 </u> core, env and part of E2/NS1 [He	<u>75</u>	5e-13
gi 1066620 gb AAC42194.1  core protein	<u>75</u>	5e-13
<pre>gi 3550761 dbj BAA32665.1  polyprotein [Hepatitis C virus]</pre>	75	5e-13
gi 1009259 dbj BAA07090.1  core, env and part of E2/NS1 [He	75	5e-13
gi 1066604 gb AAC42186.1  core protein	75	5e-13
gi 601937 dbj BAA06739.1  core, env and part of E2/NS1 [Hep	75	5e-13

		- 10
gi 1765889 dbj BAA13626.1  core, env and part of E2/NS1 [He	<u> 74</u>	6e-13
qi 1765883 dbj BAA13623.1  core, env and part of E2/NS1 [He	74	6e-13
<u>gi 532457 gb AAA21075.1 </u> polyprotein	<u>74</u>	6e-13
qi 3550759 dbj BAA32664.1  polyprotein [Hepatitis C virus]	74	7e-13
gi 532459 gb AAA21076.1  polyprotein	74	7e-13
gi 532465 gb AAA21079.1  polyprotein	74	7e-13
gi 1246377 dbj BAA09976.1  polyprotein [Hepatitis C virus]	74	8e-13
<u>gi 1480851 gb AAB88630.1 </u> polyprotein	74	8e-13
qi 532383 gb AAA21038.1  polyprotein	74	9e-13
<pre>gi 532463 gb AAA21078.1  polyprotein</pre>	<u>74</u>	1e-12
gi 21670857 dbj BAC02438.1  polyprotein [Hepatitis C virus	74	1e-12
gi 1765866 dbj BAA13614.1  core, env and part of E2/NS1 [He	74	1e-12
gi 3283982 gb AAC25417.1  core protein [Hepatitis C virus]	74	1e-12
gi 1765875 dbj BAA13619.1  core, env and part of E2/NS1 [He	74	1e-12
gi 1765877 dbj BAA13620.1  core, env and part of E2/NS1 [He	<u> 74</u>	1e-12
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<pre>gi 21670875 dbj BAC02447.1  polyprotein [Hepatitis C virus</pre>	<u> 74</u>	1e-12
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gi 1009267 dbj BAA07094.1  core, env, and part of E2/NS1 [He	73	1e-12
gi 18148498 dbj BAB83285.1  core protein [Hepatitis C virus	<u>73</u>	1e-12
gi 18148512 dbj BAB83292.1  core protein [Hepatitis C virus]	73	1e-12
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gi 18148506 dbj BAB83289.1  core protein [Hepatitis C virus	73	1e-12
<pre>gi 18148725 dbj BAB83394.1  core protein [Hepatitis C virus]</pre>	<u>73</u>	1e-12
gi 18148534 dbj BAB83303.1  core protein [Hepatitis C virus]	73	1e-12
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<pre>gi 2580421 dbj BAA23132.1  polyprotein [Hepatitis C virus]</pre>	<u>73</u>	2e-12
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	73	
gi 532445 gb AAA21069.1  polyprotein		2e-12
gi 1480855 gb AAB88632.1  polyprotein	_73	2e-12
gi 974349 gb AAB40039.1  core protein [Hepatitis C virus ty	73	2e-12
	73	2e-12
gi 2252490 emb CAA72338.1  HCV polyprotein [Hepatitis C vir		
gi 1480857 gb AAB88633.1  polyprotein	<u>73</u>	2e-12
<del></del>	73	2e-12
gil216708931dbilBAC02456.11 polyprotein [Hepatitis C virus		
gi 21670893 dbj BAC02456.1  polyprotein [Hepatitis C virus		2- 12
gi 37961928 gb AAP69953.1  polyprotein [Hepatitis C virus]	73	2e-12
gi 37961928 gb AAP69953.1  polyprotein [Hepatitis C virus]	73	2e-12 2e-12
<pre>gi 37961928 gb AAP69953.1  polyprotein [Hepatitis C virus] gi 27531310 dbj BAC54267.1  poly protein [Hepatitis C virus</pre>	73 72	2e-12
<pre>gi 37961928 gb AAP69953.1  polyprotein [Hepatitis C virus] gi 27531310 dbj BAC54267.1  polyprotein [Hepatitis C virus gi 532461 gb AAA21077.1  polyprotein</pre>	73 72 72	2e-12 2e-12
<pre>gi 37961928 gb AAP69953.1  polyprotein [Hepatitis C virus] gi 27531310 dbj BAC54267.1  poly protein [Hepatitis C virus gi 532461 gb AAA21077.1  polyprotein gi 1765891 dbj BAA13627.1  core, env and part of E2/NS1 [He</pre>	73 72 72 72	2e-12 2e-12 2e-12
<pre>gi 37961928 gb AAP69953.1  polyprotein [Hepatitis C virus] gi 27531310 dbj BAC54267.1  poly protein [Hepatitis C virus gi 532461 gb AAA21077.1  polyprotein gi 1765891 dbj BAA13627.1  core, env and part of E2/NS1 [He</pre>	73 72 72 72	2e-12 2e-12 2e-12
gi 37961928 gb AAP69953.1  polyprotein [Hepatitis C virus] gi 27531310 dbj BAC54267.1  polyprotein [Hepatitis C virus gi 532461 gb AAA21077.1  polyprotein gi 1765891 dbj BAA13627.1  core, env and part of E2/NS1 [He gi 9864799 gb AAB32183.2  putative core protein [Hepatitis	73 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12
gi 37961928 gb AAP69953.1 polyprotein [Hepatitis C virus]gi 27531310 dbj BAC54267.1 poly protein [Hepatitis C virusgi 532461 gb AAA21077.1 polyproteingi 1765891 dbj BAA13627.1 core, env and part of E2/NS1 [Hegi 9864799 gb AAB32183.2 putative core protein [Hepatitis C virus]	73 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12
gi 37961928 gb AAP69953.1 polyprotein [Hepatitis C virus]gi 27531310 dbj BAC54267.1 polyprotein [Hepatitis C virusgi 532461 gb AAA21077.1 polyproteingi 1765891 dbj BAA13627.1 core, env and part of E2/NS1 [Hegi 9864799 gb AAB32183.2 putative core protein [Hepatitis C virus]gi 23328866 gb AAC42195.2 core protein [Hepatitis C virus]gi 1183031 dbj BAA09891.1 polyprotein [Hepatitis C virus]	73 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12
gi 37961928 gb AAP69953.1 polyprotein [Hepatitis C virus]gi 27531310 dbj BAC54267.1 polyprotein [Hepatitis C virusgi 532461 gb AAA21077.1 polyproteingi 1765891 dbj BAA13627.1 core, env and part of E2/NS1 [Hegi 9864799 gb AAB32183.2 putative core protein [Hepatitis C virus]gi 23328866 gb AAC42195.2 core protein [Hepatitis C virus]gi 1183031 dbj BAA09891.1 polyprotein [Hepatitis C virus]	73 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12
gi 37961928 gb AAP69953.1  polyprotein [Hepatitis C virus] gi 27531310 dbj BAC54267.1  polyprotein [Hepatitis C virus gi 532461 gb AAA21077.1  polyprotein gi 1765891 dbj BAA13627.1  core, env and part of E2/NS1 [He gi 9864799 gb AAB32183.2  putative core protein [Hepatitis gi 23328866 gb AAC42195.2  core protein [Hepatitis C virus] gi 1183031 dbj BAA09891.1  polyprotein [Hepatitis C virus] gi 913996 gb AAB34375.1  polyprotein [Hepatitis C virus]	73 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12
gi 37961928 gb AAP69953.1 polyprotein [Hepatitis C virus]gi 27531310 dbj BAC54267.1 polyprotein [Hepatitis C virusgi 532461 gb AAA21077.1 polyproteingi 1765891 dbj BAA13627.1 core, env and part of E2/NS1 [Hegi 9864799 gb AAB32183.2 putative core protein [Hepatitis C virus]gi 23328866 gb AAC42195.2 core protein [Hepatitis C virus]gi 1183031 dbj BAA09891.1 polyprotein [Hepatitis C virus]gi 913996 gb AAB34375.1 polyprotein [Hepatitis C virus]gi 42411775 gb AAS15412.1 core protein [Hepatitis C virus]	73 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12 3e-12
gi 37961928 gb AAP69953.1  polyprotein [Hepatitis C virus] gi 27531310 dbj BAC54267.1  polyprotein [Hepatitis C virus gi 532461 gb AAA21077.1  polyprotein gi 1765891 dbj BAA13627.1  core, env and part of E2/NS1 [He gi 9864799 gb AAB32183.2  putative core protein [Hepatitis gi 23328866 gb AAC42195.2  core protein [Hepatitis C virus] gi 1183031 dbj BAA09891.1  polyprotein [Hepatitis C virus] gi 913996 gb AAB34375.1  polyprotein [Hepatitis C virus]	73 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12
<pre>gi 37961928 gb AAP69953.1  polyprotein [Hepatitis C virus] gi 27531310 dbj BAC54267.1  polyprotein [Hepatitis C virus gi 532461 gb AAA21077.1  polyprotein gi 1765891 dbj BAA13627.1  core, env and part of E2/NS1 [He gi 9864799 gb AAB32183.2  putative core protein [Hepatitis C gi 23328866 gb AAC42195.2  core protein [Hepatitis C virus] gi 1183031 dbj BAA09891.1  polyprotein [Hepatitis C virus] gi 913996 gb AAB34375.1  polyprotein [Hepatitis C virus] gi 42411775 gb AAS15412.1  core protein [Hepatitis C virus] gi 532385 gb AAA21039.1  polyprotein &gt;gi 42411745 gb AAS153</pre>	73 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12
gi 37961928 gb AAP69953.1        polyprotein [Hepatitis C virus]         gi 27531310 dbj BAC54267.1        polyprotein [Hepatitis C virus         gi 532461 gb AAA21077.1        polyprotein         gi 1765891 dbj BAA13627.1        core, env and part of E2/NS1 [He         gi 9864799 gb AAB32183.2        putative core protein [Hepatitis C virus]         gi 23328866 gb AAC42195.2        core protein [Hepatitis C virus]         gi 1183031 dbj BAA09891.1        polyprotein [Hepatitis C virus]         gi 913996 gb AAB34375.1        polyprotein [Hepatitis C virus]         gi 42411775 gb AAS15412.1        core protein [Hepatitis C virus]         gi 532385 gb AAA21039.1        polyprotein >gi 42411745 gb AAS153         gi 296898 emb CAA50610.1        nucleocapsid protein [synthetic c	73 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12
gi 37961928 gb AAP69953.1          polyprotein [Hepatitis C virus]           gi 27531310 dbj BAC54267.1          polyprotein [Hepatitis C virus           gi 532461 gb AAA21077.1          polyprotein           gi 765891 dbj BAA13627.1          core, env and part of E2/NS1 [He           gi 9864799 gb AAB32183.2          putative core protein [Hepatitis C virus]           gi 23328866 gb AAC42195.2          core protein [Hepatitis C virus]           gi 1183031 dbj BAA09891.1          polyprotein [Hepatitis C virus]           gi 913996 gb AAB34375.1          polyprotein [Hepatitis C virus]           gi 42411775 gb AAS15412.1          core protein [Hepatitis C virus]           gi 296898 emb CAA50610.1          polyprotein [Synthetic c           gi 42411777 gb AAS15413.1          core protein [Hepatitis C virus]	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12
gi 37961928 gb AAP69953.1          polyprotein [Hepatitis C virus]           gi 27531310 dbj BAC54267.1          polyprotein [Hepatitis C virus           gi 532461 gb AAA21077.1          polyprotein           gi 765891 dbj BAA13627.1          core, env and part of E2/NS1 [He           gi 9864799 gb AAB32183.2          putative core protein [Hepatitis C virus]           gi 23328866 gb AAC42195.2          core protein [Hepatitis C virus]           gi 1183031 dbj BAA09891.1          polyprotein [Hepatitis C virus]           gi 913996 gb AAB34375.1          polyprotein [Hepatitis C virus]           gi 42411775 gb AAS15412.1          core protein [Hepatitis C virus]           gi 296898 emb CAA50610.1          polyprotein [Synthetic c           gi 42411777 gb AAS15413.1          core protein [Hepatitis C virus]	73 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12
<pre>gi 37961928 gb AAP69953.1  polyprotein [Hepatitis C virus] gi 27531310 dbj BAC54267.1  polyprotein [Hepatitis C virus gi 532461 gb AAA21077.1  polyprotein gi 1765891 dbj BAA13627.1  core, env and part of E2/NS1 [He gi 9864799 gb AAB32183.2  putative core protein [Hepatitis gi 23328866 gb AAC42195.2  core protein [Hepatitis C virus] gi 1183031 dbj BAA09891.1  polyprotein [Hepatitis C virus] gi 913996 gb AAB34375.1  polyprotein [Hepatitis C virus] gi 42411775 gb AAS15412.1  core protein [Hepatitis C virus] gi 296898 emb CAA50610.1  polyprotein &gt;gi 42411745 gb AAS153 gi 296898 emb CAA50610.1  core protein [Hepatitis C virus] gi 7274365 gb AAF44740.1  core structural protein [Hepatiti</pre>	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12
<pre>gi 37961928 gb AAP69953.1  polyprotein [Hepatitis C virus] gi 27531310 dbj BAC54267.1  polyprotein [Hepatitis C virus gi 532461 gb AAA21077.1  polyprotein gi 1765891 dbj BAA13627.1  core, env and part of E2/NS1 [He gi 9864799 gb AAB32183.2  putative core protein [Hepatitis gi 23328866 gb AAC42195.2  core protein [Hepatitis C virus] gi 1183031 dbj BAA09891.1  polyprotein [Hepatitis C virus] gi 913996 gb AAB34375.1  polyprotein [Hepatitis C virus] gi 42411775 gb AAS15412.1  core protein [Hepatitis C virus] gi 296898 emb CAA50610.1  polyprotein &gt;gi 42411745 gb AAS153 gi 296898 emb CAA50610.1  core protein [Hepatitis C virus] gi 7274365 gb AAS15413.1  core protein [Hepatitis C virus] gi 42411565 gb AAS15307.1  core protein [Hepatitis C virus]</pre>	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12
<pre>gi 37961928 gb AAP69953.1  polyprotein [Hepatitis C virus] gi 27531310 dbj BAC54267.1  polyprotein [Hepatitis C virus gi 532461 gb AAA21077.1  polyprotein gi 1765891 dbj BAA13627.1  core, env and part of E2/NS1 [He gi 9864799 gb AAB32183.2  putative core protein [Hepatitis gi 23328866 gb AAC42195.2  core protein [Hepatitis C virus] gi 1183031 dbj BAA09891.1  polyprotein [Hepatitis C virus] gi 913996 gb AAB34375.1  polyprotein [Hepatitis C virus] gi 42411775 gb AAS15412.1  core protein [Hepatitis C virus] gi 296898 emb CAA50610.1  polyprotein &gt;gi 42411745 gb AAS153 gi 296898 emb CAA50610.1  core protein [Hepatitis C virus] gi 7274365 gb AAF44740.1  core structural protein [Hepatiti</pre>	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12
<pre>gi 37961928 gb AAP69953.1  polyprotein [Hepatitis C virus] gi 27531310 dbj BAC54267.1  polyprotein [Hepatitis C virus gi 532461 gb AAA21077.1  polyprotein gi 1765891 dbj BAA13627.1  core, env and part of E2/NS1 [He gi 9864799 gb AAB32183.2  putative core protein [Hepatitis C gi 23328866 gb AAC42195.2  core protein [Hepatitis C virus] gi 1183031 dbj BAA09891.1  polyprotein [Hepatitis C virus] gi 913996 gb AAB34375.1  polyprotein [Hepatitis C virus] gi 42411775 gb AAS15412.1  core protein [Hepatitis C virus] gi 296898 emb CAA50610.1  polyprotein &gt;gi 42411745 gb AAS153 gi 296898 emb CAA50610.1  core protein [Hepatitis C virus] gi 7274365 gb AAF44740.1  core structural protein [Hepatiti gi 42411565 gb AAS15307.1  core protein [Hepatitis C virus] gi 13958007 gb AAK50756.1  core protein [Hepatitis C virus]</pre>	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12
<pre>gi 37961928 gb AAP69953.1  polyprotein [Hepatitis C virus] gi 27531310 dbj BAC54267.1  polyprotein [Hepatitis C virus gi 532461 gb AAA21077.1  polyprotein gi 1765891 dbj BAA13627.1  core, env and part of E2/NS1 [He gi 9864799 gb AAB32183.2  putative core protein [Hepatitis C virus] gi 23328866 gb AAC42195.2  core protein [Hepatitis C virus] gi 913996 gb AAB34375.1  polyprotein [Hepatitis C virus] gi 913996 gb AAS15412.1  core protein [Hepatitis C virus] gi 532385 gb AAA21039.1  polyprotein &gt;gi 42411745 gb AAS153 gi 296898 emb CAA50610.1  nucleocapsid protein [synthetic c gi 42411777 gb AAS15413.1  core protein [Hepatitis C virus] gi 7274365 gb AAF44740.1  core structural protein [Hepatiti gi 42411565 gb AAS15307.1  core protein [Hepatitis C virus] gi 13958007 gb AAK50756.1  core protein [Hepatitis C virus] gi 1944376 dbj BAA19625.1  unnamed protein product [Hepatit</pre>	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12
gi 37961928 gb AAP69953.1          polyprotein [Hepatitis C virus]           gi 27531310 dbj BAC54267.1          polyprotein [Hepatitis C virus           gi 532461 gb AAA21077.1          polyprotein           gi 765891 dbj BAA13627.1          core, env and part of E2/NS1 [He           gi 9864799 gb AAB32183.2          putative core protein [Hepatitis C virus]           gi 23328866 gb AAC42195.2          core protein [Hepatitis C virus]           gi 913996 gb AAB34375.1          polyprotein [Hepatitis C virus]           gi 913996 gb AAS15412.1          core protein [Hepatitis C virus]           gi 296898 emb CAA50610.1          polyprotein >gi 42411745 gb AAS153           gi 296898 emb CAA50610.1          nucleocapsid protein [synthetic c           gi 42411777 gb AAS15413.1          core protein [Hepatitis C virus]           gi 42411565 gb AAF44740.1          core protein [Hepatitis C virus]           gi 3958007 gb AAK50756.1          core protein [Hepatitis C virus]           gi 1944376 dbj BAA19625.1          unnamed protein product [Hepatit           gi 42411147 gb AAS15098.1          core protein [Hepatitis C virus]	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12
gi 37961928 gb AAP69953.1          polyprotein [Hepatitis C virus]           gi 27531310 dbj BAC54267.1          polyprotein [Hepatitis C virus           gi 532461 gb AAA21077.1          polyprotein           gi 765891 dbj BAA13627.1          core, env and part of E2/NS1 [He           gi 9864799 gb AAB32183.2          putative core protein [Hepatitis C virus]           gi 23328866 gb AAC42195.2          core protein [Hepatitis C virus]           gi 913996 gb AAB34375.1          polyprotein [Hepatitis C virus]           gi 913996 gb AAS15412.1          core protein [Hepatitis C virus]           gi 296898 emb CAA50610.1          polyprotein >gi 42411745 gb AAS153           gi 296898 emb CAA50610.1          nucleocapsid protein [synthetic c           gi 42411777 gb AAS15413.1          core protein [Hepatitis C virus]           gi 42411565 gb AAF44740.1          core protein [Hepatitis C virus]           gi 3958007 gb AAK50756.1          core protein [Hepatitis C virus]           gi 1944376 dbj BAA19625.1          unnamed protein product [Hepatit           gi 42411147 gb AAS15098.1          core protein [Hepatitis C virus]	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12
gi 37961928 gb AAP69953.1          polyprotein [Hepatitis C virus]           gi 27531310 dbj BAC54267.1          polyprotein [Hepatitis C virus           gi 532461 gb AAA21077.1          polyprotein           gi 1765891 dbj BAA13627.1          core, env and part of E2/NS1 [He           gi 9864799 gb AAB32183.2          putative core protein [Hepatitis C virus]           gi 23328866 gb AAC42195.2          core protein [Hepatitis C virus]           gi 913996 gb AAB34375.1          polyprotein [Hepatitis C virus]           gi 913996 gb AAB34375.1          polyprotein [Hepatitis C virus]           gi 42411775 gb AAS15412.1          core protein [Hepatitis C virus]           gi 296898 emb CAA50610.1          polyprotein >gi 42411745 gb AAS153           gi 2774365 gb AAF44740.1          core protein [Hepatitis C virus]           gi 3958007 gb AAK50756.1          core protein [Hepatitis C virus]           gi 1944376 dbj BAAS15098.1          core protein [Hepatitis C virus]           gi 27544244 dbj BAC54896.1          polyprotein [Hepatitis C virus]	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12
gi 37961928 gb AAP69953.1 polyprotein [Hepatitis C virus]gi 27531310 dbj BAC54267.1 polyprotein [Hepatitis C virusgi 532461 gb AAA21077.1 polyproteingi 1765891 dbj BAA13627.1 core, env and part of E2/NS1 [Hegi 9864799 gb AAB32183.2 putative core protein [Hepatitis C virus]gi 23328866 gb AAC42195.2 core protein [Hepatitis C virus]gi 913996 gb AAB34375.1 polyprotein [Hepatitis C virus]gi 913996 gb AAB34375.1 polyprotein [Hepatitis C virus]gi 532385 gb AAB315412.1 core protein [Hepatitis C virus]gi 296898 emb CAA50610.1 polyprotein >gi 42411745 gb AAS153gi 42411777 gb AAS15413.1 core protein [Hepatitis C virus]gi 7274365 gb AAF44740.1 core protein [Hepatitis C virus]gi 42411565 gb AAS15307.1 core protein [Hepatitis C virus]gi 3958007 gb AAK50756.1 core protein [Hepatitis C virus]gi 42411147 gb AAS15098.1 core protein [Hepatitis C virus]gi 42411147 gb AAS15098.1 core protein [Hepatitis C virus]gi 27544244 dbj BAC54896.1 polyprotein [Hepatitis C virus]gi 42411769 gb AAS15409.1 core protein [Hepatitis C virus]	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12
qi 37961928 gb AAP69953.1          polyprotein [Hepatitis C virus]           qi 27531310 dbj BAC54267.1          polyprotein [Hepatitis C virus           qi 532461 gb AAA21077.1          polyprotein           qi 532461 gb AAA21077.1          polyprotein           qi 765891 dbj BAA13627.1          core, env and part of E2/NS1 [He           qi 9864799 gb AAB32183.2          putative core protein [Hepatitis C virus]           qi 23328866 gb AAC42195.2          putative core protein [Hepatitis C virus]           qi 913996 gb AAB34375.1          polyprotein [Hepatitis C virus]           qi 913996 gb AAS15412.1          polyprotein [Hepatitis C virus]           qi 296898 emb CAA50610.1          polyprotein >gi 42411745 gb AAS153           qi 296898 emb CAA50610.1          qi 42411777 gb AAS15413.1          core protein [Hepatitis C virus]           qi 3958007 gb AAS15307.1          core protein [Hepatitis C virus]           qi 1944376 dbj BAA19625.1          qi 42411147 gb AAS15098.1          core protein [Hepatitis C virus]           qi 2754424 dbj BAC54896.1          polyprotein [Hepatitis C virus]           qi 2754424 dbj BAC54896.1          polyprotein [Hepatitis C virus]           qi 42411769 gb AAS15409.1          polyprotein [Hepatitis C virus]           qi 42411769 gb AAS15409.1          polyprotein [Hepatitis C virus]	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12
qi 37961928 gb AAP69953.1          polyprotein [Hepatitis C virus]           qi 27531310 dbj BAC54267.1          polyprotein [Hepatitis C virus           qi 532461 gb AAA21077.1          polyprotein           qi 532461 gb AAA21077.1          polyprotein           qi 765891 dbj BAA13627.1          core, env and part of E2/NS1 [He           qi 9864799 gb AAB32183.2          putative core protein [Hepatitis C virus]           qi 23328866 gb AAC42195.2          putative core protein [Hepatitis C virus]           qi 913996 gb AAB34375.1          polyprotein [Hepatitis C virus]           qi 913996 gb AAS15412.1          polyprotein [Hepatitis C virus]           qi 296898 emb CAA50610.1          polyprotein >gi 42411745 gb AAS153           qi 296898 emb CAA50610.1          qi 42411777 gb AAS15413.1          core protein [Hepatitis C virus]           qi 3958007 gb AAS15307.1          core protein [Hepatitis C virus]           qi 1944376 dbj BAA19625.1          qi 42411147 gb AAS15098.1          core protein [Hepatitis C virus]           qi 2754424 dbj BAC54896.1          polyprotein [Hepatitis C virus]           qi 2754424 dbj BAC54896.1          polyprotein [Hepatitis C virus]           qi 42411769 gb AAS15409.1          polyprotein [Hepatitis C virus]           qi 42411769 gb AAS15409.1          polyprotein [Hepatitis C virus]	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12
qi 37961928 gb AAP69953.1          polyprotein [Hepatitis C virus]           qi 27531310 dbj BAC54267.1          polyprotein [Hepatitis C virus           qi 532461 gb AAA21077.1          polyprotein           qi 532461 gb AAA21077.1          polyprotein           qi 765891 dbj BAA13627.1          core, env and part of E2/NS1 [He           qi 9864799 gb AAB32183.2          putative core protein [Hepatitis C virus]           qi 23328866 gb AAC42195.2          putative core protein [Hepatitis C virus]           qi 913996 gb AAB34375.1          polyprotein [Hepatitis C virus]           qi 913996 gb AAS15412.1          polyprotein [Hepatitis C virus]           qi 296898 emb CAA50610.1          polyprotein >gi 42411745 gb AAS153           qi 296898 emb CAA50610.1          nucleocapsid protein [Synthetic c           qi 42411777 gb AAS15307.1          core protein [Hepatitis C virus]           qi 13958007 gb AAK50756.1          core protein [Hepatitis C virus]           qi 2754424 dbj BAC54896.1          polyprotein [Hepatitis C virus]           qi 2754424 dbj BAC354896.1          polyprotein [Hepatitis C virus]           qi 2754999 gb AAS15409.1          polyprotein [Hepatitis C virus]           qi 13957999 gb AAK50752.1          core protein [Hepatitis C virus]	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12
qi 37961928 gb AAP69953.1          polyprotein [Hepatitis C virus]           qi 27531310 db BAC54267.1          polyprotein [Hepatitis C virus           qi 532461 gb AAA21077.1          polyprotein [Hepatitis C virus           qi 37961928 gb AAA21077.1          polyprotein [Hepatitis C virus           qi 3864799 gb AAB32183.2          core, env and part of E2/NS1 [He           qi 23328866 gb AAC42195.2          putative core protein [Hepatitis C virus]           qi 39396 gb AAB34375.1          polyprotein [Hepatitis C virus]           qi 332385 qb AAB315412.1          core protein [Hepatitis C virus]           qi 296898 emb CAA50610.1          polyprotein [Hepatitis C virus]           qi 42411777 qb AAS15413.1          core protein [Hepatitis C virus]           qi 42411565 qb AAS15307.1          core protein [Hepatitis C virus]           qi 4241147 qb AAS150756.1          qi 4241147 qb AAS15098.1          core protein [Hepatitis C virus]           qi 42411769 qb AAS15409.1          qi 42411769 qb AAS15409.1          qore protein [Hepatitis C virus]           qi 3957999 qb AAK50752.1          qi 1974345 qb AAB40037.1          core protein [Hepatitis C virus]           qi 974345 qb AAB40037.1          core protein [Hepatitis C virus]	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12
qi 37961928 gb AAP69953.1          polyprotein [Hepatitis C virus]           qi 27531310 dbj BAC54267.1          polyprotein [Hepatitis C virus           qi 532461 gb AAA21077.1          polyprotein           qi 532461 gb AAA21077.1          polyprotein           qi 765891 dbj BAA13627.1          core, env and part of E2/NS1 [He           qi 9864799 gb AAB32183.2          putative core protein [Hepatitis C virus]           qi 23328866 gb AAC42195.2          putative core protein [Hepatitis C virus]           qi 913996 gb AAB34375.1          polyprotein [Hepatitis C virus]           qi 913996 gb AAS15412.1          polyprotein [Hepatitis C virus]           qi 296898 emb CAA50610.1          polyprotein >gi 42411745 gb AAS153           qi 296898 emb CAA50610.1          nucleocapsid protein [Synthetic c           qi 42411777 gb AAS15307.1          core protein [Hepatitis C virus]           qi 13958007 gb AAK50756.1          core protein [Hepatitis C virus]           qi 2754424 dbj BAC54896.1          polyprotein [Hepatitis C virus]           qi 2754424 dbj BAC354896.1          polyprotein [Hepatitis C virus]           qi 2754999 gb AAS15409.1          polyprotein [Hepatitis C virus]           qi 13957999 gb AAK50752.1          core protein [Hepatitis C virus]	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12
qi 37961928 gb AAP69953.1          polyprotein [Hepatitis C virus]           qi 27531310 dbj BAC54267.1          poly protein [Hepatitis C virus           qi 532461 gb AAA21077.1          polyprotein           qi 765891 dbj BAA13627.1          core, env and part of E2/NS1 [He           qi 9864799 gb AAB32183.2          putative core protein [Hepatitis C virus]           qi 23328866 gb AAC42195.2          putative core protein [Hepatitis C virus]           qi 913996 gb AAB34375.1          polyprotein [Hepatitis C virus]           qi 913996 gb AAB315412.1          core protein [Hepatitis C virus]           qi 42411775 gb AAB15412.1          core protein [Hepatitis C virus]           qi 296898 emb CAA50610.1          polyprotein >qi 42411745 gb AAS153         nucleocapsid protein [synthetic c           qi 42411777 qb AAS15413.1          core protein [Hepatitis C virus]           qi 42411565 qb AAF44740.1          core structural protein [Hepatitis C virus]           qi 13958007 qb AAK50756.1          core protein [Hepatitis C virus]           qi 4241147 qb AAS15098.1          core protein [Hepatitis C virus]           qi 27544244 dbj BAC54896.1          polyprotein [Hepatitis C virus]           qi 3957999 qb AAK50752.1          core protein [Hepatitis C virus]           qi 13957999 qb AAK50752.1          core protein [Hepatitis C virus]           qi 19066588 qb AAC42178.1          <	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12
qi 37961928 qb AAP69953.1          polyprotein [Hepatitis C virus]           qi 27531310 db BAC54267.1          polyprotein [Hepatitis C virus]           qi 532461 qb AAA21077.1          polyprotein           qi 765891 db BAA13627.1          core, env and part of E2/NS1 [He           qi 9864799 qb AAB32183.2          putative core protein [Hepatitis C virus]           qi 2332886 qb AAC42195.2          polyprotein [Hepatitis C virus]           qi 1183031 db BAA09891.1          polyprotein [Hepatitis C virus]           qi 913996 qb AAB34375.1          polyprotein [Hepatitis C virus]           qi 913996 qb AAS15412.1          core protein [Hepatitis C virus]           qi 296898 emb CAA50610.1          nucleocapsid protein [Synthetic c           qi 296898 emb CAA50610.1          nucleocapsid protein [Hepatitis C virus]           qi 13958007 qb AAS15307.1          core protein [Hepatitis C virus]           qi 13958007 qb AAS15307.1          core protein [Hepatitis C virus]           qi 127544244 db BAC54896.1          polyprotein [Hepatitis C virus]           qi 27544244 db BAC54896.1          polyprotein [Hepatitis C virus]           qi 13957999 qb AAS15409.1          core protein [Hepatitis C virus]           qi 13957999 qb AAS00752.1          core protein [Hepatitis C virus]           qi 130458 sp P26663 POLG HCVBK         Genome polyprotein [Contains	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12
qi 37961928 gb AAP69953.1          polyprotein [Hepatitis C virus]           qi 27531310 dbj BAC54267.1          poly protein [Hepatitis C virus           qi 532461 gb AAA21077.1          polyprotein           qi 765891 dbj BAA13627.1          core, env and part of E2/NS1 [He           qi 9864799 gb AAB32183.2          putative core protein [Hepatitis C virus]           qi 23328866 gb AAC42195.2          putative core protein [Hepatitis C virus]           qi 913996 gb AAB34375.1          polyprotein [Hepatitis C virus]           qi 913996 gb AAB315412.1          core protein [Hepatitis C virus]           qi 42411775 gb AAB15412.1          core protein [Hepatitis C virus]           qi 296898 emb CAA50610.1          polyprotein >qi 42411745 gb AAS153         nucleocapsid protein [synthetic c           qi 42411777 qb AAS15413.1          core protein [Hepatitis C virus]           qi 42411565 qb AAF44740.1          core structural protein [Hepatitis C virus]           qi 13958007 qb AAK50756.1          core protein [Hepatitis C virus]           qi 4241147 qb AAS15098.1          core protein [Hepatitis C virus]           qi 27544244 dbj BAC54896.1          polyprotein [Hepatitis C virus]           qi 3957999 qb AAK50752.1          core protein [Hepatitis C virus]           qi 13957999 qb AAK50752.1          core protein [Hepatitis C virus]           qi 19066588 qb AAC42178.1          <	73 72 72 72 72 72 72 72 72 72 72 72 72 72	2e-12 2e-12 2e-12 2e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12 3e-12

gi 27531322 dbj BAC54273.1  poly protein [Hepatitis C virus	72	3e-12
gi 7650248 gb AAF65955.1  polyprotein [Hepatitis C virus]	<u>72</u>	3e-12
gi 5918963 gb AAD56197.1  polyprotein [Hepatitis C virus]	72	3e-12
gi 5918961 gb AAD56196.1  polyprotein [Hepatitis C virus]	_72	3e-12
gi 7650224 gb AAF65943.1  polyprotein [Hepatitis C virus]	72	3e-12
gi 320211 pir  JH0711 genome polyprotein - hepatitis C viru	<u>72</u>	3e-12
<pre>gi 7650256 gb AAF65959.1  polyprotein [Hepatitis C virus]</pre>	_72	4e-12
gi 42411919 gb AAS15484.1  core protein [Hepatitis C virus]	<u>72</u>	4e-12
gi 21670865 dbj BAC02442.1  polyprotein [Hepatitis C virus	_72	4e-12
gi 794209 gb AAA65812.1  precursor protein	<u>72</u>	4e-12
gi 1765887 dbj BAA13625.1  core, env and part of E2/NS1 [He	_72	4e-12
<pre>gi 5918939 gb AAD56185.1  polyprotein [Hepatitis C virus]</pre>	_72	4e-12
<pre>gi 5918937 gb AAD56184.1  polyprotein [Hepatitis C virus]</pre>	<u>72</u>	4e-12
gi 42411423 gb AAS15236.1  core protein [Hepatitis C virus]	<u>72</u>	4e-12
gi 42411673 gb AAS15361.1  core protein [Hepatitis C virus]	_72	4e-12
gi 1009269 dbj BAA07095.1  core, env and part of E2/NS1 [He	72	4e-12
gi 1765885 dbj BAA13624.1  core, env and part of E2/NS1 [He	_72	4e-12

## Alignments

```
Get selected sequences
                             Select all
                                        Deselect all
☐ >gi|532381|gb|AAA21037.1|
                              polyprotein
         Length = 191
Score = 76.6 bits (187), Expect = 1e-13
 Identities = 36/36 (100%), Positives = 36/36 (100%)
Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
           RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA
Sbjct: 156 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191
□>gi|1246371|dbj|BAA09974.1| polyprotein [Hepatitis C virus]
         Length = 191
Score = 76.6 bits (187), Expect = 1e-13
 Identities = 36/36 (100%), Positives = 36/36 (100%)
Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
           RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA
Sbjct: 156 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191
□>gi|1724052|gb|AAB40071.1| core protein [Hepatitis C virus]
         Length = 191
 Score = 75.9 bits (185), Expect = 2e-13
 Identities = 35/36 (97%), Positives = 36/36 (100%)
Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
           RAIEDG+NYATGNLPGCSFSIFLLALLSCLTTPASA
Sbjct: 156 RAIEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191
```

- sqi|1009261|dbj|BAA07091.1| core, env and part of E2/NS1 [Hepatitis C virus] Length = 414Score = 75.9 bits (185), Expect = 2e-13Identities = 36/36 (100%), Positives = 36/36 (100%) Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191  $\square > gi | 532455 | gb | AAA21074.1 |$  polyprotein Length = 191Score = 75.9 bits (185), Expect = 2e-13Identities = 35/36 (97%), Positives = 36/36 (100%) Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 RA+EDGINYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RAVEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191 □>gi|1009257|dbj|BAA07089.1| core, env,and part of E2/NS1 [Hepatitis C virus] Length = 414Score = 75.5 bits (184), Expect = 3e-13Identities = 36/36 (100%), Positives = 36/36 (100%) Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191  $\square$  >gi|974347|gb|AAB40038.1| core protein [Hepatitis C virus type 6] Length = 191Score = 75.5 bits (184), Expect = 3e-13Identities = 35/36 (97%), Positives = 35/36 (97%) Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 RAIEDGINYATGNLPGCSFSIFLLAL SCLTTPASA Sbjct: 156 RAIEDGINYATGNLPGCSFSIFLLALFSCLTTPASA 191  $\square$  >gi|2326455|emb|CAA72801.1| polyprotein [Hepatitis C virus type 6a] Length = 3018Score = 75.5 bits (184), Expect = 3e-13Identities = 36/36 (100%), Positives = 36/36 (100%) Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54

RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA

Sbjct: 156 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191

```
□>gi|1765870|dbj|BAA13616.1| core, env, and part of E2/NS1 [Hepatitis C virus]
          Length = 415
Score = 75.1 bits (183), Expect = 4e-13
Identities = 35/36 (97%), Positives = 36/36 (100%)
Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
           RA+EDGINYATGNLPGCSFSIFLLALLSCLTTPASA
Sbjct: 156 RAVEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191
☐ >qi|3550763|dbj|BAA32666.1| polyprotein [Hepatitis C virus]
          Length = 3016
Score = 75.1 bits (183), Expect = 4e-13
Identities = 36/36 (100%), Positives = 36/36 (100%)
Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
           RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA
Sbjct: 156 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191
\square > gi \mid 600265 \mid dbj \mid BAA13617.1 \mid core, env and part of E2/NS1 [Hepatitis C virus]
          Length = 414
Score = 75.1 bits (183), Expect = 4e-13
Identities = 36/36 (100%), Positives = 36/36 (100%)
Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
           RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA
Sbjct: 156 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191
\square > \underline{\text{gi}|1765879|\text{dbj}|BAA13621.1|} core, env and part of E2/NS1 [Hepatitis C virus]
          Length = 414
Score = 75.1 bits (183), Expect = 4e-13
 Identities = 36/36 (100%), Positives = 36/36 (100%)
Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
           RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA
Sbjct: 156 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191
□ >qi|1009271|dbj|BAA07271.1| core, env and part of E2/NS1 [Hepatitis C virus]
          Length = 414
 Score = 75.1 bits (183), Expect = 4e-13
 Identities = 35/36 (97%), Positives = 35/36 (97%)
```

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54

R IEDGINYATGNLPGCSFSIFLLALLSCLTTPASA

Sbjct: 156 RVIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191

 $\square > gi|21670895|dbj|BAC02457.1|$  polyprotein [Hepatitis C virus type 1b] Length = 191

Score = 75.1 bits (183), Expect = 4e-13 Identities = 34/36 (94%), Positives = 36/36 (100%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 RA+EDG+NYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RALEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191

 $\square > gi|1765868|dbj|BAA13615.1|$  core, env and part of E2/NS1 [Hepatitis C virus] Length = 414

Score = 74.7 bits (182), Expect = 4e-13 Identities = 35/36 (97%), Positives = 36/36 (100%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
RAIEDG+NYATGNLPGCSFSIFLLALLSCLTTPASA
Sbjct: 156 RAIEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191

 $\square > gi|14161281|gb|AAK54688.1|$  polyprotein [Hepatitis C virus] Length = 195

Score = 74.7 bits (182), Expect = 4e-13 Identities = 34/36 (94%), Positives = 35/36 (97%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
RA+EDGINYATGNLPGCSFSIFLLALLSCLT PASA
Sbjct: 156 RAVEDGINYATGNLPGCSFSIFLLALLSCLTVPASA 191

 $\square > gi|3550765|dbj|BAA32667.1|$  polyprotein [Hepatitis C virus] Length = 3015

Score = 74.7 bits (182), Expect = 5e-13 Identities = 35/36 (97%), Positives = 36/36 (100%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
RAIEDG+NYATGNLPGCSFSIFLLALLSCLTTPASA
Sbjct: 156 RAIEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191

Score = 74.7 bits (182), Expect = 5e-13

Identities = 35/36 (97%), Positives = 36/36 (100%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
RA+EDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191

| >gi|1066620|qb|AAC42194.1| core protein
Length = 319

Score = 74.7 bits (182), Expect = 5e-13
Identities = 36/36 (100%), Positives = 36/36 (100%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
Sbjct: 156 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191

 $\square > gi|3550761|dbj|BAA32665.1|$  polyprotein [Hepatitis C virus] Length = 3013

Score = 74.7 bits (182), Expect = 5e-13 Identities = 35/36 (97%), Positives = 36/36 (100%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 RA+EDGINYATGNLPGCSFSIFLLALLSCLTTPASA 55jct: 156 RAVEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191

Score = 74.7 bits (182), Expect = 5e-13 Identities = 35/36 (97%), Positives = 35/36 (97%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
RAIEDGINYATGNLPGCSFSIFLLAL SCLTTPASA
Sbjct: 156 RAIEDGINYATGNLPGCSFSIFLLALFSCLTTPASA 191

Score = 74.7 bits (182), Expect = 5e-13 Identities = 35/36 (97%), Positives = 36/36 (100%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
RAIEDG+NYATGNLPGCSFSIFLLALLSCLTTPASA
Sbjct: 156 RAIEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191

 $\square > gi \mid 601937 \mid dbj \mid BAA06739.1 \mid$  core, env and part of E2/NS1 [Hepatitis C virus] Length = 415 Score = 74.7 bits (182), Expect = 5e-13 Identities = 35/36 (97%), Positives = 36/36 (100%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 RA+EDGINYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RAVEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191

 $\square > gi|1765889|dbj|BAA13626.1|$  core, env and part of E2/NS1 [Hepatitis C virus] Length = 415

Score = 74.3 bits (181), Expect = 6e-13 Identities = 35/36 (97%), Positives = 36/36 (100%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 RA+EDGINYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RAVEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191

 $\square > gi|1765883|dbj|BAA13623.1|$  core, env and part of E2/NS1 [Hepatitis C virus] Length = 415

Score = 74.3 bits (181), Expect = 6e-13 Identities = 35/36 (97%), Positives = 36/36 (100%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 RA+EDGINYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RAVEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191

Score = 74.3 bits (181), Expect = 6e-13 Identities = 34/36 (94%), Positives = 35/36 (97%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
RA+EDGINYATGNLPGCSFSIFLLALLSCLT PASA
Sbjct: 156 RAVEDGINYATGNLPGCSFSIFLLALLSCLTVPASA 191

 $\frac{\square > gi|3550759|dbj|BAA32664.1|}{Length = 3019} \quad polyprotein [Hepatitis C virus]$ 

Score = 74.3 bits (181), Expect = 7e-13 Identities = 35/36 (97%), Positives = 36/36 (100%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
RAIEDGINYATGNLPGCSFSIF+LALLSCLTTPASA
Sbjct: 156 RAIEDGINYATGNLPGCSFSIFILALLSCLTTPASA 191

Score = 74.3 bits (181), Expect = 7e-13 Identities = 34/36 (94%), Positives = 35/36 (97%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 RA+EDGINYATGNLPGCSFSIFLLAL SCLTTPASA

Sbjct: 156 RALEDGINYATGNLPGCSFSIFLLALFSCLTTPASA 191

 $\square > gi | 532465 | gb | AAA21079.1|$  polyprotein Length = 191

Score = 73.9 bits (180), Expect = 7e-13 Identities = 34/36 (94%), Positives = 35/36 (97%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
RA+EDGINYATGNLPGCSFSIFLLALLSCLT PASA
Sbjct: 156 RAVEDGINYATGNLPGCSFSIFLLALLSCLTVPASA 191

 $\square > \underline{\text{gi}|1246377|\text{dbj}|BAA09976.1|}}_{\text{Length}} \quad \text{polyprotein [Hepatitis C virus]}$ 

Score = 73.9 bits (180), Expect = 8e-13 Identities = 34/36 (94%), Positives = 35/36 (97%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 R +EDGINYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RVVEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191

 $\square > \underline{\text{gi} | 1480851 | \text{gb} | \text{AAB88630.1}|} \quad \text{polyprotein}$  Length = 191

Score = 73.9 bits (180), Expect = 8e-13 Identities = 33/36 (91%), Positives = 35/36 (97%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 R +EDG+NYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RVLEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191

 $\square > \underline{gi \mid 532383 \mid gb \mid AAA21038.1 \mid} \quad \text{polyprotein}$  Length = 191

Score = 73.9 bits (180), Expect = 9e-13 Identities = 33/36 (91%), Positives = 35/36 (97%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 R +EDG+NYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RVLEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191

☐ >gi|532463|gb|AAA21078.1| polyprotein Length = 191Score = 73.6 bits (179), Expect = 1e-12Identities = 34/36 (94%), Positives = 35/36 (97%) Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 RA+EDGINYATGNLPGCSFSIFLLALLSCLT PASA Sbjct: 156 RALEDGINYATGNLPGCSFSIFLLALLSCLTVPASA 191 □>gi|21670857|dbj|BAC02438.1| polyprotein [Hepatitis C virus type 1b] Length = 191Score = 73.6 bits (179), Expect = 1e-12Identities = 33/36 (91%), Positives = 35/36 (97%) Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 R +EDG+NYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RVLEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191 □>gi|1765866|dbj|BAA13614.1| core, env and part of E2/NS1 [Hepatitis C virus] Length = 414Score = 73.6 bits (179), Expect = 1e-12Identities = 35/36 (97%), Positives = 36/36 (100%) Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 RAIEDG+NYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RAIEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191  $\square > gi \mid 3283982 \mid gb \mid AAC25417.1 \mid$  core protein [Hepatitis C virus] Length = 191Score = 73.6 bits (179), Expect = 1e-12Identities = 33/36 (91%), Positives = 35/36 (97%) Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 R +EDG+NYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RVLEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191  $\square$  >gi|1765875|dbj|BAA13619.1| core, env and part of E2/NS1 [Hepatitis C virus] Length = 414Score = 73.6 bits (179), Expect = 1e-12Identities = 35/36 (97%), Positives = 35/36 (97%) Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54

R IEDGINYATGNLPGCSFSIFLLALLSCLTTPASA

Sbjct: 156 RVIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191

```
□>gi|1765877|dbj|BAA13620.1| core, env and part of E2/NS1 [Hepatitis C virus]
          Length = 414
Score = 73.6 bits (179), Expect = 1e-12
Identities = 35/36 (97%), Positives = 35/36 (97%)
Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
           R IEDGINYATGNLPGCSFSIFLLALLSCLTTPASA
Sbjct: 156 RVIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 191
☐ >qi|18148524|dbj|BAB83298.1| core protein [Hepatitis C virus]
          Length = 191
Score = 73.6 bits (179), Expect = 1e-12
Identities = 33/36 (91%), Positives = 35/36 (97%)
Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
           R +EDG+NYATGNLPGCSFSIFLLALLSCLTTPASA
Sbjct: 156 RVLEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191
\square > gi|21670875|dbj|BAC02447.1| polyprotein [Hepatitis C virus type 1b]
          Length = 191
Score = 73.6 bits (179), Expect = 1e-12
Identities = 33/36 (91%), Positives = 35/36 (97%)
Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
           R +EDG+NYATGNLPGCSFSIFLLALLSCLTTPASA
Sbjct: 156 RVLEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191
\square > gi \mid 1009265 \mid dbj \mid BAA07093.1 \mid core, env and part of E2/NS1 [Hepatitis C virus]
          Length = 415
Score = 73.6 bits (179), Expect = 1e-12
Identities = 34/36 (94%), Positives = 36/36 (100%)
Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
           RAIEDG+NYATGNLPGCSFSIF+LALLSCLTTPASA
Sbjct: 156 RAIEDGVNYATGNLPGCSFSIFILALLSCLTTPASA 191
\square > gi \mid 1009267 \mid dbj \mid BAA07094.1 \mid core, env, and part of E2/NS1 [Hepatitis C virus]
          Length = 415
Score = 73.2 bits (178), Expect = 1e-12
 Identities = 34/36 (94%), Positives = 36/36 (100%)
```

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54

RAIEDG+NYATGNLPGCSFSIF+LALLSCLTTPASA

Sbjct: 156 RAIEDGVNYATGNLPGCSFSIFILALLSCLTTPASA 191

Score = 73.2 bits (178), Expect = 1e-12 Identities = 33/36 (91%), Positives = 35/36 (97%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54
R +EDG+NYATGNLPGCSFSIFLLALLSCLTTPASA

Sbjct: 156 RVLEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191

 $\square > gi | 18148512 | dbj | BAB83292.1 |$  core protein [Hepatitis C virus] Length = 191

Score = 73.2 bits (178), Expect = 1e-12 Identities = 33/36 (91%), Positives = 35/36 (97%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 R +EDG+NYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RVLEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191

 $\square > gi|21670879|dbj|BAC02449.1|$  polyprotein [Hepatitis C virus type 1b] Length = 191

Score = 73.2 bits (178), Expect = 1e-12 Identities = 33/36 (91%), Positives = 35/36 (97%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 R +EDG+NYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RVLEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191

 $\square > gi|18148514|dbj|BAB83293.1| core protein [Hepatitis C virus]$ Length = 191

Score = 73.2 bits (178), Expect = 1e-12Identities = 33/36 (91%), Positives = 35/36 (97%)

Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 R +EDG+NYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RVLEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191

□>gi|18148506|dbj|BAB83289.1| core protein [Hepatitis C virus]
gi|18148508|dbj|BAB83290.1| core protein [Hepatitis C virus]
gi|18148516|dbj|BAB83294.1| core protein [Hepatitis C virus]

core protein [Hepatitis C virus] gi|18148518|dbj|BAB83295.1| core protein [Hepatitis C virus] gi|18148520|dbj|BAB83296.1| core protein [Hepatitis C virus] gi|18148522|dbj|BAB83297.1| core protein [Hepatitis C virus] gi|18148526|dbj|BAB83299.1| core protein [Hepatitis C virus] gi|18148528|dbj|BAB83300.1| core protein [Hepatitis C virus] qi|18148530|dbj|BAB83301.1| gi|18148532|dbj|BAB83302.1| core protein [Hepatitis C virus] gi|18148536|dbj|BAB83304.1| core protein [Hepatitis C virus] core protein [Hepatitis C virus] qi|18148618|dbj|BAB83345.1| core protein [Hepatitis C virus] gi|18148721|dbj|BAB83392.1| core protein [Hepatitis C virus] gi|18148727|dbj|BAB83395.1| Length = 191Score = 73.2 bits (178), Expect = 1e-12Identities = 33/36 (91%), Positives = 35/36 (97%) Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 R +EDG+NYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RVLEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191  $\square$  >qi|18148725|dbj|BAB83394.1| core protein [Hepatitis C virus] Length = 191Score = 73.2 bits (178), Expect = 1e-12Identities = 33/36 (91%), Positives = 35/36 (97%) Ouery: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 R +EDG+NYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RVLEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191  $\square$  >qi|18148534|dbj|BAB83303.1| core protein [Hepatitis C virus] Length = 191Score = 73.2 bits (178), Expect = 1e-12Identities = 33/36 (91%), Positives = 35/36 (97%) Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 R +EDG+NYATGNLPGCSFSIFLLALLSCLTTPASA Sbjct: 156 RVLEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191  $\square > gi | 1480853 | gb | AAB88631.1 |$ polyprotein Length = 191Score = 73.2 bits (178), Expect = 1e-12Identities = 33/36 (91%), Positives = 35/36 (97%) Query: 19 RAIEDGINYATGNLPGCSFSIFLLALLSCLTTPASA 54 R +EDG+NYATGNLPGCSFSIFLLALLSCLTTPASA

Sbjct: 156 RVLEDGVNYATGNLPGCSFSIFLLALLSCLTTPASA 191

```
Database: All non-redundant GenBank CDS
  translations+PDB+SwissProt+PIR+PRF excluding environmental samples
    Posted date: May 11, 2004 12:59 AM
  Number of letters in database: 593,787,773
  Number of sequences in database: 1,798,171
Lambda
           K
   0.323
            0.138
                     0.415
Gapped
Lambda
   0.267
           0.0410
                     0.140
Matrix: BLOSUM62
Gap Penalties: Existence: 11, Extension: 1
Number of Hits to DB: 11,208,408
Number of Sequences: 1798171
Number of extensions: 208187
Number of successful extensions: 723
Number of sequences better than 10.0: 234
Number of HSP's better than 10.0 without gapping: 234
Number of HSP's successfully gapped in prelim test: 0
Number of HSP's that attempted gapping in prelim test: 488
Number of HSP's gapped (non-prelim): 235
length of query: 54
length of database: 593,787,773
effective HSP length: 27
effective length of query: 27
effective length of database: 545,237,156
effective search space: 14721403212
effective search space used: 14721403212
T: 11
A: 40
X1: 16 ( 7.5 bits)
X2: 38 (14.6 bits)
X3: 64 (24.7 bits)
S1: 41 (22.0 bits)
S2: 68 (30.8 bits)
```